

Current List of Pending Claims

1. (Previously Presented) A communication method, comprising:
transmitting a first information on a single frequency carrier in
accordance with a first multiframe structure having x frames, x being an
integer;
transmitting a second information on said same single frequency carrier
in accordance with a second multiframe structure having y frames, y being an
integer different than x .
arranging said first and second multiframe structures in time groups,
each of said time groups having a plurality of timeslots, and
allocating a plurality of timeslots in each of said time groups to said first
information and to said second information so that said first information and
said second information are transmitted in time slots that are different from
each other within each time group, and so that said first and second
information are transmitted in different timeslots in each of said time groups.
2. (Previously Presented) The method of claim 1, wherein said first
information includes broadcast control information.
3. (Previously Presented) The method of claim 1, wherein said first
information includes common control information.
4. (Previously Presented) The method of claim 1, wherein said first
information includes broadcast control information and said second
information includes common control information.

5. (Previously Presented) A communication method, comprising:
transmitting a first information on a single frequency carrier in
accordance with a first multiframe structure having x frames, x being an
integer;

transmitting a second information on said same single frequency carrier
in accordance with a second multiframe structure having y frames, y being an
integer different than x ; and

transmitting a third information on said same single frequency carrier in
accordance with a third multiframe structure having z frames, z being an
integer different than x and y .

6. (Previously Presented) The method of claim 1, wherein: said first
multiframe structure has 51 frames.

7. (Previously Presented) The method of claim 1, wherein said first
multiframe structure has 52 frames.

8. (Previously Presented) The method of claim 6, wherein
said second multiframe structure has 52 frames,
said first information included broadcast control information, and
said second information includes common control information.

9. (Previously Presented) The method of claim 1, wherein a base station
of a wireless communication network performs said step of transmitting a first
information and said step of transmitting a second information.

10. (Previously Presented) A communication method, comprising:
transmitting a first information on a single frequency carrier in
accordance with a first multiframe structure having x frames, x being an
integer;

transmitting a second information on said same single frequency carrier
in accordance with a second multiframe structure having y frames, y being an
integer different than x , wherein a current frame number for said second
multiframe structure is derived from parameters that represent a current frame
number for said first multiframe structure.

11. (Previously Presented) A communication system, comprising:
means for transmitting a first information on a single frequency carrier in
accordance with a first multiframe structure having x frames, x being an
integer;

means for transmitting a second information on said same single
frequency carrier in accordance with a second multiframe structure having y
frames, y being an integer different than x ;

arranging means for arranging said first and second multiframe
structures in time groups, each of said time groups having a plurality of
timeslots; and

allocating means for allocating a plurality of said timeslots to said first
information and for allocating a plurality of said timeslots to said second
information, so that said first information and said second information are
transmitted in time slots that are different from each other within each time
group, and so that said first and second information are transmitted in
different timeslots in each of said time groups.

12. (Previously Presented) The system of claim 11, wherein said first information includes broadcast control information.

13. (Previously Presented) The system of claim 11, wherein said first information includes common control information.

14. (Previously Presented) The system of claim 11, wherein said first information includes broadcast control information, and said second information includes common control information.

15. (Previously Presented) A communication system, comprising:
means for transmitting a first information on a single frequency carrier in accordance with a first multiframe structure having x frames, x being an integer;

means for transmitting a second information on said same single frequency carrier in accordance with a second multiframe structure having y frames, y being an integer different than x ; and

means for transmitting a third information on said same single frequency carrier in accordance with a third multiframe structure having z frames, z being an integer different than x and y .

16. (Previously Presented) The system of claim 11, wherein said first multiframe structure has 51 frames.

17. (Previously Presented) The system of claim 11, wherein said first multiframe structure has 52 frames.

18. (Previously Presented) The system of claim 16, wherein said second multiframe structure has 52 frames, said first information includes broadcast control information, and said second information includes common control information.

19. (Previously Presented) The system of claim 16, wherein said means for transmitting a first information and said means for transmitting a second information are components of a base station of a wireless communication network.

20. (Previously Presented) The method of claim 1, wherein said allocating step prevents said step of transmitting said first information from interfering with said step of transmitting said second information within a same time group, and prevents transmission of any one of said first information and said second information in one time group from interfering with transmission of any one of said first information and said second information in each of the other time groups.

21. (Previously Presented) The method of claim 1, wherein said first and second multiframe structures are time-grouped according to an edge-compact type network.

22. (Previously Presented) The system of claim 11, wherein said allocating step prevents said step of transmitting said first information from interfering with said step of transmitting said second information within a same time group, and prevents transmission of any one of said first information and said second information in one time group from interfering

with transmission of any one of said first information and said second information in each of the other time groups.

23. (Previously Presented) The system of claim 11, wherein said first and second multiframe structures are time-grouped according to an edge-compact type network.

24. (Previously Presented) A method for providing air interface channels in a communications network, comprising:

time multiplexing a plurality of different multiframe structures onto a single frequency carrier to accommodate different channel types defined by said plurality of different multiframe structures on the same single frequency carrier.

25. (Previously Presented) The method of claim 24, wherein said time multiplexing includes time multiplexing a first multiframe structure of x consecutive frames, a second multiframe structure of y consecutive frames, and a third multiframe structure of z consecutive frames, x , y and z being different positive integers, with values of x , y and z selected so that a given frame number for the first, second and third multiframe structures simultaneously re-occurs every $x*y*z$ frames.

26. (Previously Presented) The method of claim 25, wherein said time multiplexing further includes:

arranging said x , y and z frames of said first, second and third multiframe structures in time groups, each of said time groups having a plurality of timeslots, and

allocating a plurality of timeslots in each of said time groups to said x, y and z consecutive frames so that said x, y and z consecutive frames are transmitted in timeslots that are different from each other within each time group, and so that said x, y and z consecutive frames are transmitted in different timeslots in each of said time groups.

27. (Previously Presented) The method of claim 24, wherein said different channel types include common control channels, broadcast control channels and traffic channels.

28. (Previously Presented) The method of claim 25, wherein said first multiframe structure of x consecutive frames is associated with one of common control channels, broadcast control channels and traffic channels.

29. (Previously Presented) The method of claim 25, wherein said second multiframe structure of y consecutive frames is associated with one of common control channels, broadcast control channels and traffic channels.

30. (Previously Presented) The method of claim 25, wherein said third multiframe structure of z consecutive frames is associated with one of common control channels, broadcast control channels and traffic channels.